

**BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA  
DOCKET NO. 2019-182-E**

In the Matter of: )  
South Carolina Energy Freedom Act )  
(H.3659) Proceeding Initiated Pursuant to )  
S.C. Code Ann. Section 58-40-20(C): )  
Generic Docket to (1) Investigate and )  
Determine the Costs and Benefits of the )  
Current Net Energy Metering Program )  
and (2) Establish a Methodology for )  
Calculating the Value of the Energy )  
Produced by Customer-Generators )

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**REBUTTAL TESTIMONY OF  
JUSTIN R. BARNES  
ON BEHALF OF  
SOLAR ENERGY INDUSTRIES ASSOCIATION  
AND  
NORTH CAROLINA SUSTAINABLE ENERGY ASSOCIATION**

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**TABLE OF CONTENTS**

<b>I. INTRODUCTION .....</b>	<b>1</b>
<b>II. ECONOMIC IMPACTS IN NET METERING ANALYSIS .....</b>	<b>2</b>
<b>III. NET METERING BEST PRACTICES .....</b>	<b>9</b>
<b>IV. CONCLUSION.....</b>	<b>16</b>

**I. INTRODUCTION**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.**

A. Justin R. Barnes, 1155 Kildaire Farm Rd., Suite 202, Cary, North Carolina, 27511.  
My current position is Director of Research with EQ Research LLC.

**Q. DID YOU PREVIOUSLY SUBMIT DIRECT TESTIMONY IN THIS PROCEEDING?**

A. Yes. I submitted direct testimony on October 8, 2020.

**Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY AND HOW IS IT ORGANIZED?**

A. The purpose of my rebuttal testimony is to respond to the direct testimony filed by Dominion Energy South Carolina (“Dominion” or “DESC”) witnesses Margot Everett (“Everett Direct”) and Mark. C. Furtick (“Furtick Direct”) on topics related to the inclusion of direct and indirect economic impacts in the evaluation of the costs and benefits of net metering (Section II) and so-called net metering “best practices” (Section III). Section IV contains my concluding remarks.

**Q. DOES YOUR REBUTTAL TESTIMONY ADDRESS THE DIRECT TESTIMONY OF ANY OTHER PARTIES TO THIS PROCEEDING?**

A. I make occasional references to the direct testimony filed by other parties, such as the Office of Regulatory Staff (“ORS”), but my rebuttal testimony should not be viewed as responding in opposition to any party other than DESC.

1                    **II. ECONOMIC IMPACTS IN NET METERING ANALYSIS**

2        **Q.     PLEASE SUMMARIZE DOMINION’S RECOMMENDATIONS TO THE**  
 3                    **PUBLIC SERVICE COMMISSION (“COMMISSION”) ON HOW**  
 4                    **ECONOMIC IMPACTS SHOULD BE REFLECTED IN THE**  
 5                    **COMMISSION’S EVALUATION OF THE COSTS AND BENEFITS OF**  
 6                    **NET METERING.**

7        A.     Dominion Witness Everett recommends that the Commission exclude  
 8                    consideration of the direct and indirect economic impacts of net metering from the  
 9                    net metering cost benefit analysis. This recommendation is based on the premise  
 10                  that it is challenging “to develop a credible, defensible, and transparent  
 11                  methodology for estimating these impacts.”<sup>1</sup> Witness Everett specifically contends  
 12                  that these challenges include:

- 13                  • Economic impacts are difficult to “specifically measure and thus must be  
 14                      inferred through economic forecasting methodologies.” She further relates  
 15                      this difficulty to the challenge of defining a “Base Case” from which to  
 16                      measure the incremental impacts associated with net metering as a  
 17                      program.<sup>2</sup>
- 18                  • It is difficult to identify the portion of potential impacts, such as solar-  
 19                      related job growth, that are specifically related to net metering rather than  
 20                      other solar policies and programs.<sup>3</sup>

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<sup>1</sup> Everett Direct at 8:16-18

<sup>2</sup> *Ibid.* at 7:18 through 8:1. Specific quote at 7:18-19.

<sup>3</sup> *Ibid.* at 8:1-5.

- Offsetting negative impacts may exist to the extent that net metering is found to contribute to rate increases that affect other parts of the state economy.<sup>4</sup>

**Q. IS DOMINION WITNESS EVERETT'S POSITION CONSISTENT WITH THE ANALYTICAL FRAMEWORK FOR EVALUATING THE COSTS AND BENEFITS OF NET METERING CALLED FOR BY ACT 62?**

A. No. Act 62 requires that when evaluating the benefits and costs of net metering, the Commission shall consider, *inter alia*, "the direct and indirect economic impact of the net energy metering program to the State...". Witness Everett acknowledges this express directive from the Legislature but nevertheless recommends that the Commission effectively ignore it.

Act 62 simply does not allow the Commission to act in line with Witness Everett's recommendation. The Commission must "consider" direct and indirect economic impacts the net metering program in its evaluation, though it has discretion to determine how such consideration is reflected in the analysis and the relative weight it gives them compared to other factors.

**Q. IS THERE A FRAMEWORK THE COMMISSION COULD APPLY TO INCORPORATE ECONOMIC IMPACTS INTO THE COST BENEFIT ANALYSIS?**

A. ORS Witness Horii supplies a reasonable analytical framework for incorporating direct and indirect economic impacts into the evaluation of costs and benefits,

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<sup>4</sup> *Ibid.* at 8:5-12

1           though I note that the distinction he makes between “direct” and “indirect” impacts  
 2           is somewhat different than how the terms may be defined by others.<sup>5</sup> In any case,  
 3           he characterizes “indirect economic impacts” as suitable for inclusion “in  
 4           consideration of the tradeoffs between the goal of eliminating ‘any cost shift to the  
 5           greatest extent practicable’ and the South Carolina General Assembly’s intent to  
 6           ‘avoid disruption to the growing market for customer-scale distributed energy  
 7           resources[.]’”<sup>6</sup> ORS Witness Horii’s discussion of the role economic impacts in the  
 8           analysis of the costs and benefits of net metering is generally consistent with the  
 9           discussion I provided in my direct testimony.

10   **Q.   HOW DO YOU RESPOND TO DESC WITNESS EVERETT’S GENERAL**  
 11   **ARGUMENT THAT DIRECT AND INDIRECT ECONOMIC IMPACTS BE**  
 12   **EXCLUDED FROM THE COMMISSION’S EVALUATION SIMPLY**  
 13   **BECAUSE EVALUATING SUCH IMPACTS IS “CHALLENGING”?**

14   A.   The entire exercise of evaluating the long-term costs and benefits of a specific  
 15           program like net metering is challenging. Every individual component is subject to  
 16           uncertainty over the long term and requires assumptions and complex modeling.  
 17           While it is true that some components are amenable to quantification based on  
 18           directly observed data (*e.g.*, past marginal energy costs), this characteristic does not  
 19           necessarily dictate that forward projections will be accurate. Conversely,  
 20           backwards looking evaluation of the economic impacts of the net metering program

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<sup>5</sup> Horii Direct at 11:5-7, referring to “direct impacts” as those associated with avoided costs and indirect impacts as including benefits such as job creation and economic activity.

<sup>6</sup> *Ibid.* at 32:7-10

(e.g., jobs, economic activity) may rely on modeling rather than direct observation, but are not subject to forward-looking uncertainty. In other words, different components are subject to different uncertainties and it should not be assumed that evaluations of one component are inherently more reliable than another. Future marginal energy costs are *inferred* through forward modeling of present costs. Economic impacts of the current net metering program such as jobs and economic activity are *inferred* through modeling of historic directly measurable data.

**Q. HAVE ANY OTHER WITNESSES MODELED THE DIRECT AND INDIRECT IMPACTS OF THE NET METERING PROGRAM?**

A. Yes. Dr. Frank Hefner filed testimony on behalf of South Carolina Coastal Conservation League, the Southern Alliance for Clean Energy, Upstate Forever, and Vote Solar presenting his analysis of total economic impacts, jobs, and labor income of the solar industry by market segment for 2018 and 2019.<sup>7</sup>

**Q. HOW DO YOU RESPOND TO WITNESS EVERETT'S ASSERTION THAT IT IS NOT POSSIBLE TO DEFINE A "BASE CASE" FROM WHICH THE INCREMENTAL IMPACTS OF NET METERING CAN BE COMPARED?**

A. I disagree with Witness Everett's assertion. It is relatively easy to trace the growth in behind-the-meter solar to the establishment of net metering. South Carolina's current net metering program was established in response to Act 236 of 2014. A Joint Settlement establishing the implementation of net metering was adopted in March 2015. The Commission then adopted the investor-owned utilities ("IOUs")

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<sup>7</sup> See Hefner Direct at 6:18 – 7:14.

distributed generation (“DG”) programs in July 2015, including the establishment of solar incentive programs. For all practical purposes the solar DG industry in South Carolina as we now know it had its inception in late 2015 and early 2016. Data from the U.S. Energy Information Administration (“EIA”) on installed net metering capacity bears this out. As of the end of 2015, reported solar net metering capacity was 4.38 MW combined for all of the IOUs. By the end of 2016 total net metering capacity had risen to 44.4 MW while non-net-metered solar DG totaled 4.03 MW, of which 3.2 MW was associated with larger commercial and industrial systems in what is now Dominion service territory.<sup>8</sup> It is evident from the 2015 data that distributed solar capacity prior to the implementation of net metering under Act 236 was very low and Act 236 implementing net metering in its present form produced a dramatic increase.

**Q. IS SOME OF THE GROWTH IN NET-METERED SOLAR LIKELY ATTRIBUTABLE TO THE ESTABLISHMENT OF THE IOUS’ SOLAR INCENTIVE PROGRAMS?**

A. Yes, but industry growth now far exceeds the amounts of capacity for which the solar incentives played a role. The total amounts of capacity associated with the net metering customer-sited incentive programs was 40 MW for Duke Energy Carolinas and 13 MW for Duke Energy Progress via residential and non-residential rebate programs, and 9 MW for DESC via the residential performance incentive,

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<sup>8</sup> See U.S. EIA Annual Electric Power Industry Report, Form EIA-861 detailed data files, in annual files titled “Net\_Metering” and “Non\_Net\_Metering\_Distributed”, available at: <https://www.eia.gov/electricity/data/eia861/>. The Form 861 data files do not contain data for Non\_Net\_Metering\_Distributed resources before 2016.



1 collectively amounting to 62 MW. As of July 2020, the IOUs collectively report  
2 188.4 MW of solar net-metered generation, of which 147.4 MW is associated with  
3 residential sector installations.<sup>9</sup> If one subtracts pre-Act 236 “net metered” capacity  
4 (4.38 MW at the end of 2015), and then assumes that incentives played a role equal  
5 to net metering (50%) in motivating the first 62 MW of incremental net metered  
6 capacity (*i.e.*, subtract 31 MW) net metering as implemented pursuant to 2014 Act  
7 236 is responsible for approximately 153 MW of the total current solar net metering  
8 capacity in IOU territory (81.2%). Assigning a 50% responsibility to incentives  
9 may also overstate their contribution because the end of the incentive programs did  
10 not appreciably slow down long-term growth.

11 **Q. HOW DO YOU RESPOND TO DESC WITNESS EVERETT’S CONCERN**  
12 **THAT SOME “SOLAR” JOBS AND ECONOMIC IMPACTS MAY BE**  
13 **ASSOCIATED WITH UTILITY-SCALE AND COMMUNITY SOLAR?**

14 A. Dr. Hefner’s residential sector-specific analysis addresses this concern, though that  
15 analysis understates the full amount of beneficial economic impacts of net metering  
16 because it excludes net metered solar in the commercial sector.

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<sup>9</sup> U.S. EIA Form EIA-861M (formerly EIA-826) detailed data, file titled “Net Metering 2020”, *available at*:  
<https://www.eia.gov/electricity/data/eia861m/>

1   **Q.   WHAT SHOULD THE COMMISSION CONCLUDE FROM YOUR**  
2       **DISCUSSION OF THE ROLE THAT NET METERING HAS PLAYED IN**  
3       **PRODUCING THE ECONOMIC IMPACT NUMBERS PRESENTED BY**  
4       **DR. HEFNER?**

5   A.   Net metering is primarily responsible for the economic impacts associated with the  
6       residential sector solar as a whole. As I have demonstrated, based on the full amount  
7       of installed residential net metering capacity through July 2020, net metering as  
8       implemented under Act 236 is responsible for at least 80% of the economic impact.  
9       However, since Dr. Hefner's figures are associated with economic activity  
10      produced *only* in 2018 and 2019, which is after the Act 236 incentives had largely  
11      run their course, net metering can be considered entirely responsible for those  
12      impacts.

13   **Q.   HOW DO YOU RESPOND TO DESC WITNESS EVERETT'S ARGUMENT**  
14       **THAT THERE COULD BE OFFSETTING NEGATIVE ECONOMIC**  
15       **EFFECTS ASSOCIATED WITH NET METERING-CAUSED RATE**  
16       **INCREASES?**

17   A.   Such an effect bears consideration, but it requires that the amounts of those  
18       purported rate increases be quantified, and those amounts then evaluated for  
19       corresponding economic impact effects. I find it hard to credit the suggestion that  
20       net metering related rate increases, which might amount to cents/month for a typical  
21       customer to the extent they exist at all, would produce negative economic effects  
22       that materially affect the amounts Dr. Hefner calculates. Nevertheless, if DESC

believes that such impacts exist and would be material, it should seek to quantify them and present them as an offsetting cost against beneficial economic impacts.

Furthermore, in my view the Commission should regard Dominion's position on the economic effects of rate increases with healthy degree of skepticism. Concerns about the macroeconomic impacts of rate increases were not apparent during the pursuit of the V.C. Summer project by Dominion's predecessor. Dominion's assertions about "offsetting negative economic effects" suggest that Dominion should also perform this type of economic modeling when it seeks rate increases for its own investments.

### **III. NET METERING BEST PRACTICES**

**Q. HOW DOES DESC ADDRESS THE TOPIC OF NET METERING "BEST PRACTICES" IN ITS DIRECT TESTIMONY?**

A. DESC Witness Furtick seems to interpret the Commission's request for information on net metering "best practices" as a request for information on changes to net metering that some utilities have *sought* and some regulators or legislators have granted. Specifically, Witness Furtick characterizes information presented by Witness Everett as "a survey of best practices highlighting innovative rate structures aimed at eliminating the very costs-shifts and subsidies envisioned by Act 62."<sup>10</sup> Witness Furtick further states that the information presented by Witness Everett constitutes a "comprehensive survey[.]"<sup>11</sup> Witness Everett presents summaries of net metering practices in twenty states in Exhibit ME-1 and provides

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<sup>10</sup> Furtick Direct at 14:17-19.

<sup>11</sup> *Ibid.* at 15:7-8.

1 some further discussion of her observations and conclusions, which I describe and  
2 respond to further below.

3 **Q. DOES THE INFORMATION PRESENTED BY DESC WITNESS EVERETT**  
4 **CONSTITUTE A “COMPREHENSIVE” REVIEW OF NET METERING**  
5 **BEST PRACTICES?**

6 A. No. This so-called comprehensive review covers only twenty states, which can  
7 hardly be considered comprehensive. Furthermore, Witness Everett’s relation of  
8 trends and best practices is belied by other information presented in her own  
9 testimony and Exhibit ME-1. For instance, Figure 1 in Witness Everett’s direct  
10 testimony depicts the current status of DG compensation regimes as a national map  
11 showing a total of 35 states plus the District of Columbia utilize traditional net  
12 metering regimes. The most reasonable conclusion from this graphic is that the  
13 “best practice” remains traditional net metering.

14 **Q. IS THERE ANY INFORMATION PRESENTED IN EXHIBIT ME-1 OR IN**  
15 **WITNESS EVERETT’S TESTIMONY THAT IS INCORRECT OR**  
16 **REQUIRES UPDATING?**

17 A. Yes. One example is that Exhibit ME-1 fails to capture 2020 legislation in Virginia  
18 that expanded the aggregate net metering cap from 1% to 6% (with a 1% set aside  
19 for low-income customers) and increased the maximum system size from 20 kW to  
20 25 kW for residential customers and from 1 MW to 3 MW for non-residential  
21 customers.<sup>12</sup>

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<sup>12</sup> Virginia 2020 HB 1647 (2020 Chapter 1239). Enacted April 22, 2020, *available at*:  
<https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1239>

As a second example, Witness Everett discusses New York's efforts to develop and deploy a Value of Distributed Energy Resources ("VDER") rate - which uses a value-based monetary compensation regime to credit customer generation instead of the kWh credit regime employed under traditional net metering.<sup>13</sup> Witness Everett and Exhibit ME-1 fail to note that the VDER rate has never applied to residential and small commercial customers, and was modified in April 2019 to allow non-residential customers with DG systems up to 750 kW to elect traditional net metering instead of the VDER rate.<sup>14</sup> In December 2019 the New York Public Service Commission also extended traditional net metering through the end of 2020 while it devoted further consideration to devising a successor tariff.<sup>15</sup>

**Q. HOW DO YOU RESPOND TO THE "TRENDS" THAT WITNESS EVERETT IDENTIFIES IN TERMS OF DG RATES AND POLICY?**

A. Witness Everett properly acknowledges that there is a good deal of diversity in the details of how states have established DG rates and policies, which exist both within and outside of the net metering construct. Beyond that, Witness Everett overstates the prevalence of certain types of potential refinements.

<sup>13</sup> Everett Direct at 18:1-8 and 38:11-13.

<sup>14</sup> New York Public Service Commission, Case No. 15-E-0751. Order Regarding Value Stack Compensation. April 18, 2019, *available* at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={06B07A5A-893A-48CB-BB0E-E8B3ABF4A7C6}>

<sup>15</sup>New York Public Service Commission, Case No. 15-E-0751. Ruling dated December 20, 2019, *available* at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={381C3745-2C90-4A22-9F03-CC5E407E17FD}>

1 For instance, Witness Everett states “most jurisdictions recognize that these  
2 customers create costs related to a utility standing ready to serve that customer  
3 when the generation is not available within the hour and across the month.”<sup>16</sup>

4 Witness Everett continues that the purported “solution” that states are devising to  
5 address this concern is increased residential fixed charges and minimum bills.<sup>17</sup>

6 Witness Everett cites no specifics with respect to “most jurisdictions” having  
7 reached such a conclusion about those purported costs or their relative level of  
8 movement towards her suggested solution. There are actually only a few examples  
9 of states subjecting DG customers to higher fixed charges or minimum bills, and as  
10 I testified to the Commission in the most recent general rate cases filed by Duke  
11 Energy Carolinas, LLC<sup>18</sup> and Duke Energy Progress, LLC,<sup>19</sup> general increases in  
12 residential fixed charges have in recent years been modest.

13 Witness Everett also states that “many states departed from the NEM  
14 structures”, presumably referring to some states that have moved from kWh  
15 crediting to monetary crediting.<sup>20</sup> Witness Everett does not state what she considers  
16 to constitute “many” states but it would be more accurate to say that monetary  
17 export compensation regimes have been deployed only in “a few” states rather than  
18 many, and certainly not most states – as is readily visible in the map depicted as  
19 Figure 1 of Witness Everett’s direct testimony.

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<sup>16</sup> Everett Direct at 37:7-9.

<sup>17</sup> *Ibid.* at 37:9-19.

<sup>18</sup> PSC Docket No. 2018-319-E. Direct Testimony of Justin R. Barnes on behalf of Vote Solar. February 26, 2019.

<sup>19</sup> PSC Docket No. 2018-318-E. Direct Testimony of Justin R. Barnes on behalf of Vote Solar. March 4, 2019.

<sup>20</sup> Everett Direct at 37:20-22.

1     **Q.     HAVE YOU IDENTIFIED ANY OTHER PORTIONS OF DESC WITNESS**  
 2           **EVERETT’S TESTIMONY ON RATEMAKING TRENDS THAT YOU**  
 3           **FIND MISLEADING?**

4     A.     Yes. I find Witness Everett discussion of the number of net metering related bills  
 5           in 2020 to be misleading. Witness Everett states “[t]hroughout the United States,  
 6           there is a great deal of activity around DG compensation and NEM tariff reform. In  
 7           2020 alone, over 70 bills regarding DG compensation have been considered by state  
 8           legislatures with topics ranging from meter aggregation to export credits.”<sup>21</sup>

9           This statement is misleading for two reasons: (1) bill proposals are not  
 10          enactments, and (2) it conflates the existence of a DG-related bill with so-called net  
 11          metering “reform” when in practice that number presumably includes bills that  
 12          *expand* availability and access to net metering. For instance, a full list of 2020 net  
 13          metering bills would include the enacted Virginia bill I previously cited, the  
 14          language for which was ultimately included in the final reconciled language of six  
 15          different enacted bills – which in turn pulled provisions from a total of ten bills  
 16          seeking to expand net metering availability.<sup>22</sup> I suppose that one could consider  
 17          these to be net metering “reform” bills, but DESC’s idea of net metering “reform”  
 18          does not appear to include the expansion of retail rate net metering.

19    **Q.     ARE THERE OTHER PORTIONS THAT YOU FIND MISLEADING?**

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<sup>21</sup> *Ibid.* at 36:13 through 37:1.

<sup>22</sup> See 2020 enacted net metering bills: HB 1647, HB 572, HB 1526, HB 1184, SB 851, and SB 710. The bills that were not enacted (carried over or included into another bill) are: HB 912, HB 1067, HB 206, and HB 1677. All of these bills are *available at*: <https://lis.virginia.gov/cgi-bin/legp604.exe?202+men+BIL>

1 A. Yes. Witness Everett's discussion of utility efforts to increase residential fixed  
 2 charges is also misleading. Witness Everett states "[a]ccording to NC Clean Energy  
 3 Technology Center '50 States of Solar Q2 2020 Quarterly Report', 27 utilities  
 4 requested increases in residential fixed charges or minimum bills to address this  
 5 issue of recovering fixed costs for low volume use customers."<sup>23</sup> This statement is  
 6 misleading in several ways.

7 First, the 50 States of Solar Report relates the quoted figure of 27 in  
 8 reference to "actions" – which include utility proposals *and* regulatory  
 9 determinations.<sup>24</sup> A utility proposal is not regulatory approval and regulators rarely  
 10 adopt utility proposals of this type without change. Furthermore, the reported  
 11 number (of 27 utilities or "actions") would capture instances where a utility's  
 12 proposal to increase residential fixed charges was in fact *entirely rejected* by  
 13 regulators. For instance, as noted in Witness Everett's Exhibit ME-1, Kentucky  
 14 Utilities in Virginia had its proposal to increase the residential fixed charge from  
 15 \$12/month to \$16.11/month rejected, which occurred in April 2020.<sup>25</sup>

16 Finally, Witness Everett presents no further information tying a request to  
 17 increase residential fixed charges - a proposal for which is made in virtually every  
 18 utility rate case - to any specific arguments for why such an increase was

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<sup>23</sup> Everett Direct at 37:14-17.

<sup>24</sup> NC Clean Energy Technology Center. 50 States of Solar: Q2 2020 Quarterly Report, Executive Summary. July 2020, available at: [https://nccleantech.ncsu.edu/wp-content/uploads/2020/07/Q2-20\\_SolarExecSummary\\_Final.pdf](https://nccleantech.ncsu.edu/wp-content/uploads/2020/07/Q2-20_SolarExecSummary_Final.pdf). See Table 1 of the report at p. 5 and the description of what constitutes an "action" at pp. 3-4.

<sup>25</sup> Virginia State Corporation Commission. Docket No. PUR-2019-00060. Final Order dated April 6, 2020, available at: <https://scc.virginia.gov/docketsearch/DOCS/4m%40101!.PDF>



1 purportedly necessary (*i.e.*, the idea that low usage customers are being subsidized),  
 2 let alone how regulators viewed and acted on the request.

3 **Q. ARE YOU SUGGESTING THAT REVIEW AND CONSIDERATION OF**  
 4 **POTENTIAL CHANGES TO NET METERING OR RATE DESIGN FOR**  
 5 **DG CUSTOMERS IS NOT INCREASINGLY COMMON ON A NATIONAL**  
 6 **LEVEL?**

7 A. No. It is true that there is increasing interest among both legislators and regulators  
 8 in refining DG compensation regimes in a variety of ways and the existence of a  
 9 possible cost-shift is a fairly prominent point of interest in these reviews. However,  
 10 proposals for changes, whether at the legislative or regulatory level, are not changes  
 11 *adopted*, and the act of policy review and investigation of whether a cost shift exists  
 12 should not be conflated with the conclusion that a cost-shift does in fact exist; let  
 13 alone an endorsement of a need for dramatic policy changes.

14 In addition, there are critically important nuances that have shaped  
 15 legislative and regulatory action (*i.e.*, to institute changes to existing policy) and  
 16 inaction (*i.e.*, decisions to retain existing policy). For instance, in Hawaii traditional  
 17 net metering persisted until grid penetration reached levels *ranging from 30% to*  
 18 *53% of peak load on the major islands* and regulators were faced with a pressing  
 19 need to discourage exports.<sup>26</sup> Such a situation is not comparable to the decision  
 20 facing the Commission here, nor is it comparable to circumstances in states like

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<sup>26</sup> Hawaii Public Utilities Commission. Docket No. 2014-0192. Order No. 33258, Table 3 at p. 161. October  
 12, 2015, *available* at:  
<https://dms.puc.hawaii.gov/dms/DocumentViewer?pid=A1001001A15J13B15422F90464>

1 Michigan and Kentucky, where utilities used their outsized political power relative  
2 to a small local DG industry to force changes without objective studies or  
3 investigations by the respective regulatory agencies.

4 **Q. HOW DO YOU RECOMMEND THAT THE COMMISSION VIEW THE**  
5 **INFORMATION THAT DESC PRESENTS ON SO-CALLED NET**  
6 **METERING “BEST PRACTICES”?**

7 A. The Commission should disregard DESC’s portrayal of net metering best practices  
8 because it is incomplete, biased, and contains readily identifiable factual errors.  
9 While I recognize that the Commission requested that utilities provide information  
10 on net metering best practices in the present proceeding, I respectfully recommend  
11 that it withhold judgment on best practices for devising net metering successor  
12 tariffs or refinements to the utilities’ tariff-specific proceedings. This will allow  
13 other intervenors to present the Commission with a more complete picture of the  
14 national policy landscape, including the variety of nuances present in any given  
15 state.

16 **IV. CONCLUSION**

17 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE**  
18 **COMMISSION AND THE REASONS FOR THOSE**  
19 **RECOMMENDATIONS.**

20 A. On the matter of consideration of economic impacts in the Commission’s  
21 evaluation of the costs and benefits of net metering, the Commission should reject  
22 DESC’s position that such impacts should be excluded from the evaluation because:  
23 (a) adopting DESC’s position would violate an express statutory directive, and (b)

1 I have demonstrated that DESC's specific concerns about the reliability of  
2 economic impact estimates lack merit. The Commission should instead refer to my  
3 direct testimony as well as the direct testimony of witness Horii for guidance on its  
4 consideration of direct and indirect economic impacts, and to the direct testimony  
5 of witness Hefner on the magnitude of those impacts.

6 On the matter of DESC's discussion of net metering "best practices", the  
7 Commission should defer reaching any conclusions based on the information  
8 DESC has presented because DESC's analysis: (a) is nothing close to  
9 "comprehensive" as DESC represents it is; (b) contains meaningful factual  
10 inaccuracies and omissions; and (c) ultimately reaches erroneous conclusions based  
11 on its lack of completeness, lack of attention to critical details, and  
12 mischaracterization of various pieces of supposed "evidence" that it presents.  
13 Accordingly, I urge the Commission to withhold making any judgments on the  
14 national picture of net metering policy and refinements until it can be presented  
15 with a more complete and accurate assessment in the context of specific utility tariff  
16 proposals.

17 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

18 **A.** Yes.  
19